

10/009184

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Page 1:

Please replace the second full paragraph as follows:

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### **BACKGROUND OF THE INVENTION**

In plastic technology molded parts usually are produced in large numbers using an injection molding process and microtechnically fabricated mold inserts, whereupon they are forwarded in bulk for mounting. This process also is used for mounting microstructured molded parts, called microcomponents in the following, whereby the mounting tolerances of the microcomponents are significantly smaller due to the microstructures in comparison to molded parts without microstructures.

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### **SUMMARY OF THE INVENTION**

The object of the invention is to specify a magazine with microstructured molded parts and a procedure for the fabrication and packaging of microstructured molded parts, whereby the position of the microstructured molded parts to each other that is established during replicative fabrication of the molded parts will be maintained in the invented magazine during handling, transportation and mounting of the molded parts, and whereby all disadvantages described above will be eliminated.

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### **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1      a) Top view, and b) cross-section of a microstructured component.

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Please insert the following between the second and third paragraphs:

Figures 15 to 19 show a tool for replicative fabrication of a magazine/molded part composite in various process steps according to Patent Claim 2, and

Figures 20 to 23 show a tool for replicative fabrication of a magazine/molded part composite in various process steps according to Patent Claims 12 and 13.

Please replace the third paragraph on Page 15 as follows:

#### **DETAILED DESCRIPTION OF THE INVENTION**

Figure 1 shows a first design example of a microcomponent (1, 10) fabricated with the invented replicative procedure. This microcomponent (1, 10) has a rectangle shape with side surfaces (18 and 18') and consists of two functional parts (1a and 1b), an unstructured bottom part (1a) and a microstructured face (1b). The face (1b) contains four equally spaced microstructures (14) in form of sinks (1c-f). According to figure 1b, the side surfaces of the bottom part (1a) are referenced as 18a, 18a' and the face surfaces (1b) are referenced as 18b, 18b'.

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Please insert after the second paragraph, the following:

The procedure according to Patent Claim 2 is depicted in Figures 15 to 19. The injection molding tool (5) consists of one first tool half (5a) and one second tool half (5b), which are shown in their open position in figure 15. The first tool half (5a) includes ejector pins (11a to 11e) and mold mounts (7d). The second tool half (5b) includes sprue-side mold mounts (7c) with

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sprue channels (29) and gate (29a).

Figure 16 shows the injection molding tool in its closed position. Mold material is injected through the sprue channels (29) to fabricate the magazine (12) in the mold mounts (7c and 7d). In figure 17, the injection molding tool is opened, whereby the magazine (12) remains in the first tool half (5a). The second tool half (5b) is replaced with another tool half (5c) which contains sprue-side mold mounts (7b). In figure 18 the molding tool is closed again and plastic material is injected through the sprue channels (9) to injection mold the microcomponents (1, 10). The microcomponents (1, 10) are inside the magazine (12) and are enclosed by the magazine (12).

Figure 19 shows the demolding process, whereby the magazine with the microcomponents (1, 10) is ejected by the ejector pins (11a to 11e).

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Please insert after the first full paragraph, the following:

The procedure according to Patent Claims 12 and 13 is depicted in figures 20 to 23. The prefabricated magazine (12') is inserted into an additional injection molding tool (6) consisting of two tool halves (6a and 6b). The same reference numbers indicate the same components in this drawing. After closing the injection molding tool, the microcomponents (1, 10) are injection molded by introducing the mold material through the sprue channels as shown in figures 21 and 22. Then the ejectors (11a to 11e) eject the magazine/molded part composite (15') as shown in figure 23.